

Remarks:

1. Claims 1 through 43 were originally presented in this application. No new claims have been added. By a series of earlier restriction requirements, claims 1 through 31, 40, 41, and 43 have been withdrawn. Applicants retain the right to pursue the subject matter of these claims by separate divisional application(s). Claims 32 through 39 and 42 have been examined by the Examiner in the Office Action. Independent claim 32 stands rejected in the Office Action as considered by the Examiner to be unpatentable over either U.S. Patent 6,183,226 to *Wood et al.* (Figs 1 and 2) or German Patent Document 27-13-468 to *Zeitvogel* (Figs 2 and 3) in view of U.S. Patent 6,102,681 to *Turner*. Dependent claims 33 through 39 and independent claim 42 also stand rejected as being unpatentable over *Wood et al.* in view of *Turner* as set forth in the Office Action.

2. Independent claim 42 was also objected to in the Office Action because the claim should end with a period. Claim 42 has been amended to cure this objection. In particular, the semicolon at the end of the originally submitted claim has been replaced with a period. This amendment was made to correct an inadvertent typographical error and is not related to patentability, and is not intended to (and is not believed to) alter the scope of the claim as originally presented.

3. With regard to independent claim 32, starting on page 3 of the Office Action, the Examiner states "each of the primary references discloses a progressing cavity stator comprising a fiber reinforced composite component providing an internal helical cavity... The claims differ from the primary references by reciting that the plurality of fibers are disposed such that distinct portions thereof follow correspondingly distinct directions. *Turner* teaches forming fibers into braids (40) which follow distinct directions." The Examiner continues: "it would have been obvious to one having ordinary skill in the art to dispose the plurality of fibers in either *Wood et al.* or *Zeitvogel* into braids that follow distinct directions, as taught by *Turner*, to strengthen the composite component."

4. Applicants respectfully traverse this rejection. Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness according to MPEP § 2143, which lists three basic requirements that must be met to establish a *prima facie* case; (i) there must be a suggestion or motivation to combine the references, (ii) there must be a reasonable expectation of success, and (iii) the references must teach or suggest all the claim limitations. The Examiner's statement that "it would have been obvious to one having ordinary skill in the art to dispose the plurality of fibers in either *Wood et al.* or *Zeitvogel* into braids that follow distinct directions, as taught by *Turner*" is merely conclusory and does not recite a suggestion or motivation to combine *Wood et al.* or *Zeitvogel* with *Turner*. There is no teaching, nor even any suggestion, in any of the references that *Wood et al.* or *Zeitvogel* should be combined with *Turner* as suggested by the Examiner. Absent such a teaching or suggestion of the combination, one skilled in the art would not have been motivated to combine *Wood et al.* or *Zeitvogel* with *Turner*. The Examiner's obviousness rejection of claim 32 is improper as non-compliant with MPEP § 2143.

5. Moreover, it can be fairly said that *Turner* teaches away from a combination with *Wood et al.* or *Zeitvogel* to render claim 32 obvious, contrary to the position of the Examiner in the Office Action. In column 5, lines 14 through 20, *Turner* states that the fibers are preferably only incorporated into an inner section of the elastomer core (i.e., adjacent to surface 12 in FIG. 4 of *Turner*). *Turner* further states that the innermost fiber layer preferably approximately follows, or parallels, the undulating (helical) profile of inner surface 12 (column 5, lines 21 through 24). *Turner* still further states that the outer section of the elastomer core (which is adjacent to the out stator housing) preferably includes only pure elastomer 9 (as also shown on FIG. 4 of the *Turner* patent). Thus *Turner* teaches a relatively hard liner (fiber reinforced elastomer), intended for contact with a rotor, deployed on a relatively soft substrate (pure elastomer 9).

6. *Turner*'s disclosed arrangement, as described in column 5, is thus directly contrary to the structure recited in claim 32. Claim 32 recites a stator in which an elastomer

liner is deployed on an inner surface of a fiber reinforced composite component. In other words, in direct contrast to the teaching of *Turner*, claim 32 recites a relatively soft liner (an elastomer) deployed on a relatively soft substrate (a fiber composite component). The artisan of ordinary skill would, therefore, not have been motivated to combine *Wood et al.* or *Zeitvogel* with *Turner*.

7. Furthermore, contrary to the prescriptions of MPEP § 2143, a combination of *Wood et al.* or *Zeitvogel* with *Turner* does not teach all of the elements recited in claim 32. Claim 32 recites a progressing cavity stator comprising (i) a fiber reinforced composite component and (ii) an elastomer liner disposed on an internal surface of the fiber reinforced composite component. The fiber reinforced composite component includes “a plurality of fibers disposed in a matrix material, the plurality of fibers disposed such that distinct portions thereof follow correspondingly distinct directions.” As noted by the Examiner, neither *Wood et al.* nor *Zeitvogel* teach such a fiber reinforced component with an internal elastomer liner, where the fiber reinforced composite component includes a plurality of fibers disposed such that distinct portions thereof follow correspondingly distinct directions. However, *Turner* does not disclose this structure either. *Turner*’s fiber reinforced composite component is the liner, not the substrate supporting the liner. Thus, a combination of *Wood et al.* or *Zeitvogel* with *Turner* does not teach a stator as recited in claim 32, and thus cannot properly form a basis for an obvious rejection that is compliant with MPEP § 2143.

8. For any or all of the foregoing reasons, Applicants respectfully submit that claim 32 as originally presented is allowable. Applicants request reconsideration and allowance of claim 32. Independent claim 32 being allowable, it follows *a fortiori* that dependent claims 33 through 39 must also be allowable, since these dependent claims carry with them all the elements of independent claim 32.

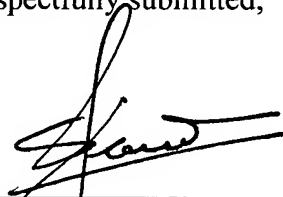
9. The structure of independent claim 42 that is relevant to the Examiner’s obviousness rejection of claim 42 is substantially similar to corresponding structure recited in claim 32. Applicants submit that independent claim 42 is therefore allowable over the prior

art of record for any or all of the reasons that independent claim 32 is submitted to be allowable, as set forth above. Applicants respectfully request reconsideration and allowance of claim 42.

Applicants believe that in view of the foregoing remarks, pending claims 32-39 and 42 are allowable, and that this application is now in full condition for allowance, which action Applicants earnestly solicit. Should the Examiner have any questions, or believe that a telephone interview may expedite the further examination of this application, the Examiner is requested to contact the undersigned at the telephone number shown below.

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Respectfully submitted,



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